

1           1.     In a cellular network that facilitates the transmission of messages between  
2 cellular computing devices, the messages often being multi-part messages that consist of  
3 multiple short message fragments of limited size, a method for facilitating an application  
4 sending the multiple short message fragments without having the calling application  
5 implement detailed processing required to fragment the message, the method comprising  
6 the following:

7           an act of receiving a function call from a calling application via a standardized  
8 interface, the function call requesting the transmission of a message over the cellular  
9 network;

10          an act of dividing the message into a number of short message fragments of limited  
11 size; and

12          an act of causing each of the short message fragments to be transmitted over the  
13 cellular network.  
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15          2.     A method in accordance with Claim 1, wherein the act of receiving a  
16 function call from a calling application via a standardized interface comprises the  
17 following:

18          an act of receiving a function call from a calling application via an application  
19 program interface.  
20

21          3.     A method in accordance with Claim 1, wherein the act of the receiving a  
22 function call from a calling application via a standardized interface comprises the  
23 following:

24          an act of receiving a function call from a standardized user interface.

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2           4.     A method in accordance Claim 1, further comprising the following:  
3           an act of processing the message prior to the act of dividing the message into a  
4     number of short message fragments.

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6           5.     A method in accordance with Claim 4, wherein the act of processing the  
7     message comprises the following:  
8           an act of compressing the message.

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10          6.     A method in accordance with Claim 4, wherein the act of processing the  
11     message comprises the following:  
12          an act of encrypting the message.

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14          7.     A method in accordance with Claim 4, wherein the act of processing the  
15     message comprises the following:  
16          an act of wrapping the message in XML.

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18          8.     A method in accordance with Claim 1, further comprising the following  
19     prior to the act of dividing the message into a number of short message fragments of  
20     limited size:

21          an act of determining that the message must be transmitted as a plurality of short  
22     messages in order to comply with a size restriction of the cellular network.  
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1           9.     A method in accordance with Claim 1, wherein the cellular network is a  
2 Global System for Mobile communication (GSM) cellular network.  
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4           10.    A method in accordance with Claim 1, wherein the cellular network  
5 implements TDMA cellular technology.  
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7           11.    A method in accordance with Claim 1, wherein the cellular network  
8 implements CDMA technology.  
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10          12.    A method in accordance with Claim 1, wherein the cellular network  
11 implements wireless CDMA technology.  
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13          13.    A method in accordance with Claim 1, wherein the cellular network  
14 implements 1xRTT technology.  
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16          14.    A method in accordance with Claim 1, wherein the cellular network  
17 implements 3G technology.  
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19          15.    A method in accordance with Claim 1, wherein the cellular network  
20 implements UMTS technology.  
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22          16.    A method in accordance with Claim 1, wherein the cellular network  
23 implements CDMA2000 technology.  
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1           17.     A method in accordance with Claim 1, further comprising the following:  
2           an act of receiving a request for a delivery report for the message from the calling  
3 application;  
4           an act of gathering delivery reports received back from the communication network  
5 for each short message fragment;  
6           an act of interpreting the gathered delivery reports for each of the short message  
7 fragments to determine an appropriate delivery response for the message as a whole; and  
8           an act of returning the appropriate delivery response for the message as a whole to  
9 the calling application.

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11           18.     A method in accordance with Claim 17, wherein the act of receiving a  
12 request for a delivery report is performed via the standardized interface.

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14           19.     A method in accordance with Claim 17, wherein the act of returning the  
15 appropriate delivery response is performed via the standardized interface.

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1           20.    A computer program product for use in a cellular network that facilitates the  
2   transmission of messages between cellular computing devices, the messages often being  
3   multi-part messages that consist of multiple short message fragments of limited size, the  
4   computer program product for implementing a method for facilitating an application  
5   sending the multiple short message fragments without having the calling application  
6   implement detailed processing required to fragment the message, the computer program  
7   product comprising one or more computer-readable media having stored thereon the  
8   following:

9           computer-executable instructions for receiving a function call from a calling  
10   application via a standardized interface, the function call requesting the transmission of a  
11   message over the cellular network;

12           computer-executable instructions for dividing the message into a number of short  
13   message fragments of limited size; and

14           computer-executable instructions for causing each of the short message fragments  
15   to be transmitted over the cellular network.

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17           21.    A computer program product in accordance with Claim 20, wherein the one  
18   or more computer-readable media are physical storage media.

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20           22.    A computer program product in accordance with Claim 20, wherein the  
21   computer-executable instructions for receiving a function call from a calling application  
22   via a standardized interface comprise the following:

23           computer-executable instructions for receiving a function call from a calling  
24   application via an application program interface.

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23. A computer program product in accordance with Claim 20, wherein the computer-executable instructions for receiving a function call from a calling application via a standardized interface comprise the following:

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computer-executable instructions for receiving a function call from a standardized user interface.

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24. A computer program product in accordance with Claim 20, wherein the one or more computer-readable media further have stored thereon the following:

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computer-executable instructions for determining that the message must be transmitted as a plurality of short messages in order to comply with a size restriction of the cellular network prior to executing the computer-executable instructions for dividing the message into a number of short message fragments of limited size.

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25. A computer program product in accordance with Claim 20, wherein the one or more computer-readable media further have stored thereon the following:

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computer-executable instructions for receiving a request for a delivery report for the message from the calling application;

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computer-executable instructions for gathering delivery reports received back from the communication network for each short message fragment;

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computer-executable instructions for interpreting the gathered delivery reports for each of the short message fragments to determine an appropriate delivery response for the message as a whole; and

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1 computer-executable instructions for returning the appropriate delivery response for  
2 the message as a whole to the calling application.  
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1           26.     In a cellular network that facilitates the transmission of messages between  
2     cellular computing devices, the messages often being multi-part messages that consist of  
3     multiple short message fragments of limited size, a method for facilitating an application  
4     sending the multiple short message fragments without having the calling application  
5     implement detailed processing required to fragment the message, the method comprising  
6     the following:

7           an act of receiving a function call from a calling application via a standardized  
8     interface, the function call requesting the transmission of a message over the cellular  
9     network; and

10          a step for transmitting the message over the cellular network in response to the  
11     function call.

12  
13          27.     A method in accordance with Claim 26, wherein the step for transmitting  
14     the message over the cellular network in response to the function call comprises the  
15     following:

16          an act of dividing the message into a number of short message fragments of limited  
17     size; and

18          an act of causing each of the short message fragments to be transmitted over the  
19     cellular network.

20

1           28.     In a cellular network that facilitates the transmission of messages between  
2     cellular computing devices, the messages often being multi-part messages that consist of  
3     multiple short message fragments of limited size, a method for a receiving application to  
4     receive a multi-part message, the method comprising the following:

5           an act of receiving a plurality of short message fragments corresponding to a multi-  
6     part message;

7           an act of reassembling the plurality of fragments into the multi-part message; and

8           an act of passing the reassembled message to a receiving application via a  
9     standardized interface.

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11           29.     A method in accordance with Claim 28, wherein the act of passing the  
12     reassembled message to a receiving application via a standardized interface comprises the  
13     following:

14           an act of passing the reassembled message to a user interface.

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16           30.     A method in accordance with Claim 28, wherein the act of passing the  
17     reassembled message to a receiving application via a standardized interface comprises the  
18     following:

19           an act of passing the reassembled message to a receiving application via an  
20     application program interface.

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22           31.     A method in accordance with Claim 28, further comprising the following:

1 receiving a function call from the receiving application via a standardized  
2 interface, the function call requesting the processing and forwarding of complete multi-part  
3 messages.  
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32. A computer program product for use in a cellular network that facilitates the transmission of messages between cellular computing devices, the messages often being multi-part messages that consist of multiple short message fragments of limited size, the computer program product for implementing a method for a receiving application to receive a multi-part message without performing the detailed processing necessary to reassemble the message, the computer program product comprising one or more computer-readable media having stored thereon the following:

- computer-executable instructions for receiving a plurality of short message fragments corresponding to a multi-part message;
- computer-executable instructions for reassembling the plurality of fragments into the multi-part message; and
- computer-executable instructions for passing the reassembled message to a receiving application via a standardized interface.

33. A computer program product in accordance with Claim 32, wherein the computer-executable instructions for passing the reassembled message to a receiving application via a standardized interface comprise the following:

- computer-executable instructions for passing the reassembled message to a user interface.

34. A computer program product in accordance with Claim 32, wherein the computer-executable instructions for passing the reassembled message to a receiving application via a standardized interface comprise the following:

1 computer-executable instructions for passing the reassembled message to a  
2 receiving application via an application program interface.

3

4 35. A computer program product in accordance with Claim 32, wherein the one  
5 or more computer-readable media further have stored thereon the following:

6 computer-executable instructions for receiving a function call from the receiving  
7 application via a standardized interface, the function call requesting the processing and  
8 forwarding of complete multi-part messages.

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10 36. A computer program product in accordance with Claim 32, wherein the one  
11 or more computer-readable media are physical storage media.

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